

**Family Engagement, Language, and Literary Webinar Series:
Digital Tools for Families that Promote Children's Language and Literacy**

Shela Merchant-Jooma: Hello everyone! Welcome to the National Center on Parent, Family, and Community Engagement webinar series on Family Engagement, Language and Literacy. This is our series for this current Fall 2017. We're so pleased to have you join us today. My name is Shela Merchant-Jooma and I'm from the National Center on Parent, Family, and Community Engagement. And I will kick us off and get us started and then turn it over to our wonderful presenters to take you through today's content. The focus for today is, digital tools for families that promote children's language and literacy. Early care and education professionals can partner with parents and families, to help children develop their language and literacy skills and meet school readiness goals.

In these webinars, we're inviting professionals who work in Head Start, Early Head Start, and Child Care settings to learn about the different ways that they can engage families to promote children's language and literacy development. Thereby enhancing other skills and supporting school readiness goals. Before we jump into this exciting topic, I wanted to give you a little bit of information about how this webinar platform works.

You may be familiar with Adobe Connect but just as a reminder, it's best to connect to the webinar using a hard-wired internet as opposed to Wi-Fi. This will make sure that you have consistent connectivity. You can also improve the speed of your connection by closing any other programs that you might have running, like email or anything else that's in the background. During this call your phones will be on mute. And we'll invite you to use some other features of Adobe Connect to help us to--for you to interact with us. So you can chat in the type -- sorry, you can type in the chat box which is located underneath the slides. And many of you have been chatting with us about different tools that you've had experience with. And feel free to send us question throughout, we'll be monitoring it during the webinar. And then we'll also ask some specific questions at certain points for--to get your input on this topic. If you get disconnected from this webinar then you can use the same link that you used to join again. And finally, the webinar is being recorded and it'll be posted on the ECLKC.

So I'd like to invite our presenters to introduce themselves.

Joshua Sparrow: Hi! I'm Joshua Sparrow. I'm the director of the Brazelton Touchpoints Center in the Division of Developmental Medicine at Boston Children's Hospital. And I'm one of the co-PI's for the National Center for Parent, Family, and Community Engagement of the Office of Head Start and the Office of Childcare. Sarah

Lytle: Hi everyone! My name is Sarah Lytle and I'm from the University of Washington's Institute for Learning and Brain Science or ILABS.

Rechele Brooks: Good afternoon! My name is Rechele and I'm a researcher at ILABS also at the University of Washington. Nice to meet you all.

Shela: So we'd like to start off today by talking a little bit about some of our learning objectives for the webinar. We know that technology is all around us and parents look to technology for information about child development. As a result, some parent engagement tools are starting to reach parents through digital devices. So in today's webinar, we're going to report on a recent review of digital tools for increasing parent engagement with children's language and literacy. We look specifically at tools with

activities and tips for children from birth to age eight. And in today's webinar, we'll present some of the characteristics of these available digital tools. We'll talk about some of the global themes that emerge from our review. And we'll consider important advances and next steps. Please note that the tools that we're describing here today do not comprise an exhaustive list and we're not endorsing any of these individual products. We're merely providing a compilation of information. And so the Center for Parent, Family, and Community Engagement is providing a service to help programs or states consider these various options. The goal of the webinar is to equip communities, parents, and programs and families with the information to make thoughtful decisions if and when you might choose to use a digital tool. So today, we're going to talk about how to use technology as a tool for family engagement in children's language and literacy development. We're going to review some of the research related to the current digital tools that are available including identifiable themes and gaps in the literature. And then we're also going to provide some tips for selecting digital tools that promote children's language and literacy. So I'd like to turn it over to Josh Sparrow now to talk a little bit about family engagement.

Josh: Hi everybody! And thank you, Shela. I am really enjoying reading the comments in the chat and I hope you'll keep on writing. A couple of thoughts about what I'm already seeing here. One is, people are talking about at least one app which sounds like it's a tool for teachers to connect with, engage with parents. And I really appreciate you all sharing that with each other and with us. And to say that the focus of our look at what's out there was a bit different from that. It was to look specifically at digital tools for families to engage with their children in support of their children's early language and literacy development. And part of why we saw this as part of our role in our focus and family engagement relates to what Juanita Housman said a while back in the chat. Where I think Juanita, you said -- Oh, I'm looking for it, but I remember you said "Yeah, I have some parents who are using this tool but I'm not familiar with it." And so part of our thinking was, there isn't really solid research or evidence based on these tools and we want to be clear that we can't present this to you with that kind of information or back-up behind it. And I think the reason behind that is that the technology has and will move so quickly that by the time you get a longitudinal study telling you if this does what and what the long-term effects are, people will be on to a whole new kind of technology. So we just aren't seeing the kinds of studies that we wish we did have to be able to back up taking a look into this world. But we thought we ought to look anyway because of comments like Juanita's. Where, you know, this is the world that families are in the midst of.

And so part of engaging with families is joining them where they are. And so we thought part of this look is to help all of us understand well where are families. Recently, I sent a photo of a brand new baby grand-nephew to a friend of mine and she said to me, "Josh, you should put this on Instagram". And of course I didn't have an Instagram account but I thought, okay, I'll try to figure that out. And then when I said to my kids, "Look at my Instagram account." They said, "Are you kidding? You have an Instagram account?" Like, you're so old you have to be out of it! So, this is an attempt to sort of look at, well where are families when they're in the digital world? And you'll see as you hear more, that we do know that a lot of families are spending a lot of time in this world. So let's take a look at the definition of family engagement and I hope you'll all take a look at the ECLKC website and look at the National Center on Parent, Family, and Community Engagement for more information about family engagement. To look at some of the other resources we've developed.

But, we're defining it as an interactive process. So it's a two-way process through which early childhood providers and other early childhood professionals, family members and their children build positive and

goal-oriented relationships in support of positive family and child outcomes. It is a shared responsibility of families and professionals that requires mutual respect for the roles and strengths each has to offer. So, this resource that we've developed is just a way of coming alongside parents so that we do have a better understanding of what parents are looking at or what they may be wondering about looking at. And again, many of the comments say, "I don't have any experience with parenting apps." and that's totally fine. I'm sure many of us didn't or don't but so that we can become familiar with where some families may be at. I also want to add that because we were looking at families engaging with their children in support of their children's early language and literacy development, part of the definition of family engagement is about parents engaging with children. Children are at the heart of meaningful family engagement.

They are the inspiration for positive, goal-oriented, parent-provider relationship. And parents enter into relationships with all of us on their children's behalf and they deepen these relationships with their children in mind. Parents know their children better than anyone. They know their temperaments, personalities, strengths, vulnerabilities, talents and special needs. And again, it's parents knowledge about their children that they'll be factoring into the decisions they make. Particularly in this arena where there isn't solid evidence about if anything works, and how, and for which children. Parents also know their own cultures and the cultures they want to transmit to their children. And they'll be making judgments about whether or not any of these digital tools actually are supportive or not with their cultures and what they'd like to give to their children from their cultures. When parents share their knowledge of their children and their cultures with us, they improve our practices and the quality of our programs. Providers create authentic partnerships with parents in large part when they convey their eagerness to welcome parents expertise about their children, and when providers and parents can express to each other the passion that they feel about the children.

You know, to say a little bit more about the rational project, was to promote children's school readiness. But if we take a look at the framework, for parents and community engagements for head start programs. And you look at the family outcomes column, you can see in the red circles, families as lifelong educators. So, I don't think anybody has to tell a parent that they're the child's first and most important and longest lasting teacher. I think parents understand that about their role. And I think that's part of why, if they're aware of these apps, they may be wondering, "Well, should I be doing something with them or not?" What we're hoping is that we'll end up with a way of helping you and parents bring some critical considerations to, how do I make a judgment about these things. Particularly with a lack of research that's really going to help us know, are these okay? Are these helpful?

Similarly, families as learners, families are learning about these tools just as we are. And then under the child outcomes column, the purple column there, the outcomes are: That the children are learning, that they're engaged in positive relationships with family members, caregivers and other children. And one of the thoughts we've had that you'll hear more about is, to look at whether or not parents focusing on these digital tools or apps, actually disrupt that positive relationship. Take time away from it, or whether or not they can be in support of it. And then of course children are ready for school.

Shela: And now we'll hear from Sarah Lytle. Thanks, Shela! And I want to talk a little bit about some of the benefits of high quality early learning experiences. So, Josh set us up really nicely in thinking about some of the rationale of this review that we did. Some of the reasons why we wanted to conduct this system scan of some of these technologies. But really, if we think about fundamentally, how do children

learn language, and how do they gain these early literacy experiences. We know that that happens through interactions with their parents and caregivers at the most basic level. And research can tell us—research continues to tell us that the quality of language inputs parents is the most powerful predictor of children's later language. So we're sort of moving beyond this idea that, you need to give kids quantity of language. Certainly that's important to a certain extent, but the quality between that interaction between parents and caregivers and children is really what's going to drive children's later language development. We know for example that when parents speak to children and engage with children, children will vocalize more and their vocabulary will grow. And the best kinds of interactions for growing children's language has really been called a "Conversational Duet." And so you can think of this as a very complex interaction that goes a little bit beyond the simple back and forth. It's this interaction that builds over time and you see parents and children even providing mutual regulation for each other over time. So it's this complicated dance that caregivers and parents and children engage in as they're experiencing these earliest interactions that we know are critical for language development. And so if we think about what is the intersection then of technology, Josh started to talk a little bit about this, But there has been some research demonstrating that parent coaching can be effective when it comes to providing a nudge for parents to engage with children around language and literacy skills.

But we also know that in-person interventions and coachings can be quite costly. And so one of the ways that we've been seeing some of these app developers and tool developers address this issue, is by creating digital technology. And using this—this technology really capitalizes on the rapid increase and availability of technology for families around the country. We know that cell phone and internet use is widespread in the United States. About 85 percent of American adults use the internet. 95 percent of Americans own some type of cell phone. Particularly if you look at parents of children 8 and under, about 70 percent of them own a smart phone. And we know that low income families in particular might use mobile devices to gain access to the online world. So that's really their window into the internet. In addition, we know that survey data shows that about 50 percent of households own a tablet device these days. It's really you know, if you think about your own digital world and the technology that you see in the communities and the parents that you're working with, I think we can all agree that it's only, it's very likely that these numbers are only going to increase over time.

So the availability of technology is certainly there. And so we're think about, you know, how have people capitalized on the availability of this technology to provide some sort of coaching or nudge kind experience for parents to really interact with their children around language and literacy development. In fact, a recent survey found that parents are looking to digital media for information and guidance on their children's development. Parents have reported that it would be helpful to have digital content delivered directly to them from experts in child development. And almost 70 percent of parents reported that they would use more positive parenting strategies if they knew what they were. And so if you think about parents desire to really learn more about this area, it might be that digital technology is a window into some of these parenting strategies. So I'd like to turn this over to Rechele now who's going to talk a little bit about the search that we conducted. And give you some of the parameters that we used when we were searching through these technologies.

Rechele: Thanks, Sarah! This is Rechele. I'm excited to tell you about how we looked for the apps and tools. In short, we systematically searched for the digital tools and we were looking for ones that potentially would help with early literacy and language. So we conducted the search during January to April of this year in 2017. We searched the internet and U.S. version of app stores. So as we ran the

search, we included terms that might describe the tool. So for example, one of the searches used words like apps early literacy language and parent engagement. And we used these kinds of searches to find possible suggestions and tools- I want to add though that it was difficult to find apps and services even if you used a search term like parenting tips and literacy and language. So, it was an interesting challenge to find tool for everyone. So to get help, we asked colleagues based in the United States for suggestions. And we also went to known internet repositories including New America's Atlas and it's called Atlas Integrating Technology in Early Literacy. And we looked to a recent challenge called Bridging the Word Gap Challenge. At the end of our search, we were sort of a little surprised, or at least I was, that we found 140 possible tools and suggestions. It was clear that this general topic had generated a great amount of interest. That our next step was to focus on which one of these possible suggestions were actually mobile tools designed to help parents and that would meet our requirements.

So, next I'd like to talk about what we included. So, we identified whether the digital tools tried to promote face-to-face interactions. We selected tools with the following features. Helped parents with young children ages zero to 8 years old. Supports children's language and literacy skills. We accepted tools no matter what languages they offered. And each tool should be offering samples, reminders or tips to parents. So we wanted it to be that- that the tool was offering activities that parents can do with their children. And one of our other concerns was that-that tool needed to have free content via mobile technology. So, those would include smart phones or tablets. I would want to mention though, during our review we did not examine how much parents liked the tools, how consistently they used the tool, or even how well tools support parent engagement with early language and literacy.

That information just wasn't quite at our fingertips or available at this time. Thus, the effectiveness of the tools was not part of the decision to include or exclude a tool. However, later we'll be presenting other considerations to help you to review tools on your own. I'd like to move on to what we excluded. We went-we took all the 140 suggestions and researches and we carefully reviewed them. We excluded ones that were not actually available for mobile use or needed special tools or equipment. We didn't want anyone to have to buy anything beyond what they already had in their home. We excluded own tools that were not freely available for parents. For example, some apps and services required a period membership to download and use the app, so these were excluded. We also excluded any tool that did not mention language or literacy in its description. We also eliminated apps if they intended the tool to be used by a child. So basically, looking at the slide, we show a picture of children using a tool and that's exactly the kind of tools we did not include in this review. So some examples of things that children might use are electronic books, or skill building games. For the review tools though, we wanted to avoid giving a phone or a tablet to the child.

We wanted to encourage parent child interactions so that was our main reason for excluding those types of tools. The last reason to exclude a tool was because the tool did not prompt parents into action. For example, if a tool was giving out information but it was mainly a portable reference library, or a way to connect with other parents we didn't include it in our summary. Now, I'd like to return to one of our core features of our included tools. We looked for tools that support parents' engagement. So, even though the tools send information to parents, via their phones or their tablets, the tools and our intent was for parents to put away their device before engaging with their children. So in short, the parents get the tips for language-rich play and activities. After viewing the tip, they put their phones away. Then parents talk and interact with their children. So, at this point we thought we should ask you to share your thoughts. We are wondering what questions do you have about what we included and excluded

from the review? Please continue to use the chat box. I see we're working on percentages, I'm glad we're able to provide that information to our attendees.

We could go on if people don't have questions about what was included and excluded, but I'll leave the chat box open for a moment. Ah, here come the comments. Thank you. Yes, we agree that we're really excited that we were able to find apps that the parents use and that the children don't need to use. And another important question that I'll be covering in a moment is that there are other languages available, and I'll be reiterating this, but Spanish and English are the most common. It looks like we're getting a lot of exciting commentary about the apps, and some of these topics we'll be covering in a little bit later in the talk.

Sarah: Rechele, it looks like people are excited that we excluded apps that have a cost associated with them. I think that's particularly important for people who work with low income families.

Rechele: Oh, I'm glad you noticed that. Yes, that's going to be one of our points to go over shortly. It looks like there's a lot of things we could be discussing. Sarah, whenever you're ready, we could wrap up this part because we have so many questions to cover. And Sarah's going to be talking about seven critical considerations. But we'll let some of the questions pop up a little bit longer until Sarah is ready.

Sarah: Yeah, and I think there's a couple of quick notes here Rechele. So a couple of questions about dual language learners and the National Center on Parent, Family, and Community Engagement actually has an upcoming webinar that will talk about that. So another webinar in this series that's actually taking place October 31. So that one will talk specifically about dual language learners.

And thank you, Shela, for contributing in the chat window, that we were not able to review how effective each of the tools were. Or I see someone's asking about whether we know if parents that did the [Inaudible] activity. So, we're not really looking at the effectiveness in those terms. We're really looking at a scan of the available technology and the tools that are available. So certainly a next step down the line would be really thinking about how effective the tools are and really thinking about researching that vein. Okay, so let's move on here and please continue to have the chat and we'll be monitoring throughout. But I want to give us, before we jump into the specifics of what we found with our review, we want to start by giving you some of the critical considerations to keep in mind if you're thinking about selecting a tool in general. Or, if you're considering a particular tool.

So, just a reminder that the tools we describe here do not comprise an exhaustive list. We're not endorsing any of these individual products. We're merely providing a compilation of information. So this is the National Center on Parent, Family, and Community Engagement providing a compilation to help programs or states consider these options. And I want to highlight again, we've mentioned this a couple of times already but, across the tools, the content really came from different sources and advisers. Different tools might have used academic research on child development. Or they might have used their own clinical expertise to craft the information that was included in these tools. And the important piece here is that despite the efforts these developers to use this information from past research, none of the tools that we identified had been evaluated by independent academic studies. So we really are in a place where there's a lack of evidence base for the effectiveness for digital tools. And I think that really goes with some of the comments we're already seeing in the chat box in terms of, how do we know it's effective? And I think the short answer here is that we don't, yet. We simply know that these tools exist. So, until more of an evidence base exists, we really don't know if specific tools are going to improve

parent engagement or child development. But as we conducted the review, we found some similar features of different tools and we also found some unique features of tools. And we used this information, combined with our knowledge of child development, to compile a list of things that we identified as critical considerations.

So, Josh talked earlier about the fast changing landscape of digital technology. And it's true that the apps and tools that are here today might be gone tomorrow. Or they might have a different version tomorrow. And so what we're trying to do here is pull back a little bit and think about some of these abstract questions that you might be able to yourself. To help yourself evaluate these tools that you see. So they're really intended to help you conduct your own review of tools to find the right fit for your own community and for the parents that you work with. And they're intended to guide your selection as new tools come onto the market. And so as we're going through each of these seven considerations, I'd like you to think about the needs of your community. And think about which of these considerations would be most important. So we're not going to actually have this discussion now, but I wanted to preview it at this point so that as we're going through these seven considerations, you can think about this. Then we'll have a discussion in the chat window at the end, after we review each of these considerations.

So, here we go. These are the seven critical considerations that we identified. And we're going to go through each of these seven. But in brief, we're asking or suggesting that you identify hidden costs of tools. That you check literacy levels. That you understand the complexity of the technology. That you look for two-way interactions. That you ask whether a tool can customize to children's ability. That you're considering language and culture, and that you're balancing the tool with the interaction. So we'll talk a little bit more at this point here about each of these considerations. So let's start first with identifying hidden costs. So, many people own the technology that they might need to use a digital tool. So people might already own a cell phone or a tablet. Yet many phone plans, or cellular plans, are prepaid phones and they might charge for text messages. In the case of apps, you might need internet or cellular data to download the original app. And you might even need kind of cellular data to receive daily activity suggestions through the app. So you should really consider whether a particular tool requires this kind of additional costs to you, and whether your community can afford those additional costs. Next, we suggest that you check literacy levels. So much of the content in text messaging tools and apps is text based. As a result, some communities might choose a tool that incorporates photos, audio's, or video's. And such content doesn't require parental literacy for youth. And for the tools we reviewed in this study, in this review, we do provide a reading level that we calculated from sample text. But, as you evaluate tools in the future, you should consider whether the text is appropriate for your community and the parents that you're working with. Andy Schultz asked whether a particular tool can support parents of all literacy levels.

Next, we're thinking about understanding the technology and understanding the complexity of this technology. And here we actually mean two different things. We both mean, how user friendly is the tool, but we're also wondering how comfortable are caregivers in using technology? And how comfortable parents are with using a variety of technologies. So some tools might require navigating through apps or downloading materials. Text tools can be easier to operate in some instances because you're simply receiving a text message. This consideration may inform your choice of digital tool, whether you do the text messaging service or an app. And parents vary in how well they're able to navigate these digital tools. And to an extent I think we all are different in our abilities to support parents as they're navigating these kinds of tools. So you might consider, as you're considering different

technology is both the ease of the tool and the confidence of parents in your community to operate such tools. So, in thinking about two-way interactions, all of the tools that we included in this review were designed to promote two-way parent child interactions. So the goal here is not that children are using the technology. The goal here is that the technology is promoting a parent child interaction. That is reciprocal and goes both ways. But there are some tools that are available that also allow the parents to interact with tool developers for the purpose of additional customization of the content and for creating a feedback loop for the developer.

So some tools ask parents to provide feedback or activity suggestions. And tools of the future might even have the capability to engage with parents and back and forth interactions. So, most of the tools we reviewed did not have this capability but this is one of those things that we started to see coming on with some of the newer technology. That might be an important point as you're looking for future technologies. So thinking about two-way interactions, both in terms of promoting parent child two-way interactions and in terms for promoting interactions between the parent and the app developer for the purposes of creating that feedback loop. Another important piece here is the ability of a tool to customize to a specific child's ability. So, many of the tools match information and suggested activities to a child's age. And we're thinking here about chronological age. So tools do that in a variety of ways. Some tools customize to a child's exact age in terms of 12 months, 13 months etcetera. Others use broad categories like maybe your child fits into the 12 to 18 month range. So one method is not necessarily inherently better than the other. But depending on the needs of your community, and the needs of each family that you're working with, you might want a tool that is more or less customized. Some of the tools that we reviewed began with children's chronological age and then we're able to adjust subsequent activities based on parent feedback or successful completion. So if a parent says, "Oh, this activity is too advanced for my child." then the app or tool knows how to customize future activity suggestions accordingly. This option may help families who have children with developmental delays or disabilities. But again, there's no independent research to test whether these options are actually helpful to families. And in the future, tools may offer more opportunities to customize content based on the child's development ability as opposed to their chronological age.

So another important consideration here is the role of language in culture. So some tools offer content in multiple languages but many don't actually. And so you're certainly going to need to consider the language needs of the community when selecting a tool. But you're also going to think about whether the language translations are responsive to cultural differences and whether the activities that are suggested are consistent with cultural values and practices. So it's not just a language piece here, we're thinking about a broader cultural consideration. And then finally, we're thinking about the role of the tool and balancing the tool with the interaction. So the tools that we reviewed are designed for parent use. They are not designed for children to use. In fact, we excluded digital tools that were primarily designed for use by children. If you're interested in researching resources that look specifically at children's use of technology, we can provide a list of those kinds of resources, there are lots of them. But for right now we're really focusing on tools that prompt parents to engage with children because we know that's how children learn best. But, if you think about the practicality of this, when parents check their phone, children may unintentionally be drawn to interact with the tool too, it may disrupt important interactions between the parent and the child. So ideally these digital tools will encourage parent child interactions and not impede them.

And so you're really going to look for tools that balance this idea of prompting an interaction and not impeding an interaction because we know that that interaction is really where children are going to learn. So at this point I want to come back to this discussion. So this is the same that I primed us with at the beginning of our discussion of these critical considerations. So, as you think about the needs of your community, which of these considerations would be most important? And we've added a list of those seven critical consideration here on the right hand side of the slide. So you can reflect on that as you think about some of the needs of your community. So I'd love to hear from you in the chat window and think about which of these considerations are you thinking of as most important for your community and the parents that you're working with. We have people identifying balancing the tool with the interaction, looking for two-way interaction, some people say all of the above. Looking for hidden cost and literacy levels, customizing to a child's abilities. Somebody says working with low income families, it's hard to tell where each child will be developmentally. All of the above, in some cases here. Lots of people identifying these hidden costs. And I do think that's true, you know, even if people have the technology, there are lots of unintentional costs perhaps that are associated with some of these tools. Great, lots of great answers here. So keep that chat going and I'll turn it over to Rechele now to talk a little bit more about what we found.

Rechele: Okay, thanks, Sarah. So now we're going to talk about what we found after we reviewed all those 140 apps. So, with our systematic and careful process, we narrowed down the list of tools. The tools we narrowed down to had the potential to engage parents and their child's language and literacy development. The next step was we contacted agencies with the apps or text message services. Our goal was to confirm that the app or service was free to use. After that, we invited them to participate in a phone interview. And for that we used broad questions. We wanted to learn about the digital tools.

Some example questions would be: What are the goals of the service or app? What features engage parents? And the last example question would be, do you have plans to evaluate the program? After these interviews, we identified 15 tools that seemed to be engaging parents and family members. Out of the total, 11 were mobile apps and 4 were text message services. Eventually, you'll be able to see all of the 15 in our summary tables, we hope to make those available soon. The 15 tools were available during our review, but I just want to remind you that there may be other ones that you find, and the group has certainly mentioned a lot of interesting candidates. And new tools are always popping up on the market. Another reminder is that the tools that we describe and use as examples here do not comprise an exhaustive list when we present that table in the future. We're merely providing a compilation of information. And, the center is providing a scan or a service to help programs or states consider these options. Another thing we think about is we compiled this list to show the kinds of tools that may help parents. We're not endorsing any specific products. Nor do we have any independent academic research to single out whether one tool is better than another one. The other reminder I wanted to give you is the Office of Head Start and the National Center would like to remind us all that we are not endorsing any tools in this process. We are gathering information about what tools are available and that may help programs engage families in promoting children's language and literacy development. Alright, so I want to give you a sneak preview of what our summary tables are going to look like.

We made two versions so we have them up on the slide. We have a provider version and we have a parent version. The goal of the tables is to show the features of the tools and to help make comparisons across the tools. So once they're available, we hope it will be a resource for you all. What I wanted to highlight is both versions of the table cover four areas. So, we'll be covering those in a moment but let

me give you an overview first. The first is how to find a tool if you're interested in one. Next, there's basic information, cost, and content delivery. The provider version has three extra columns to talk about content delivery that we found more interesting. And one thing to keep in mind once the summary tables are available, below each table we will have a list of definitions to explain the icons and key terms. So for example, we'll give of what we mean by content advisers when we talk about content delivery. Alright, so let's talk about part of the table. The first thing that I would like to go over is if you're interested, how you would find a listed tool. But keep in mind that none of the resources-I know we've mentioned this before but we wanted to just reiterate this- that none of the resources have been shown to be effective but what we want to give you is information you can use if you're interested in selecting tools for use with your community and the parents who work with you. Alright, so imagine on the left side of the table is where we're going to start. And the first column gives you basic information, how would you find the listed tool. And in the final table we'll have it in an alphabetical order.

So what we do is for example, when we say there's a tool name and description, the description is saying a little bit about the tool. It tells you whether it's a mobile app or a text message service, and then gives you a brief description of what it does. One thing to keep in mind, that parents and family members can try the tool, and the apps and tools allow anyone that's in a child's life to use the tool. One thing I would like to bring up next is there are a few ways to find the tool. One basic way is if you have a mobile device, search in its app store. What we'll be providing is a table that gives you an app name that works if you put it into whatever your search into apps store looks like. Another way is you can go to a website and we'll be providing that in the table. The websites always include a direct link to the app and if it's a text message service, it tells you the code you would use to sign up and other ways to sign up for the text message service.

One thing I would like to reiterate is that keep in mind, users need cellular data or Wi-Fi when they connect to the internet or download the app. And, you need some sort of service when you're signing up for the text message as you get started. So, that would match onto some of the hidden cost we talked about earlier. What I would like to do next is go over another part of the table. So this time you can see the top of the table a piece of it from the provider version. We call this section, basic information right next to the digital tool. So the basic information we wanted to give you just the nuts and bolts of what ages does the app intend to serve and what languages are available. The provider version is also the one that gives our estimated reading level from the text samples. So let's briefly go over all this information a little bit more in detail. One thing I wanted to mention is tools differ in what ages they support. Some tools give tips, say from birth to two years of age others might go from zero to five. And, we have some that go all the way up to age eight. The tools allow you in some cases to include more than one child. And this option might be interesting for families or programs that-as you go to explore the tools. The basic information we thought would be important is what languages are available. The most common languages were English and Spanish. The other languages we found during our review were Arabic, Somali, and Vietnamese. Some apps intend to expand their options as they work with new partners. So this language list could change very quickly with time. Or with time depending on how these take on new partners, pardon me.

One other section that we've all agreed on that would be important is cost. We have cost factors early in the table. Our original rule and continued requirement was that the tool needed to be free to start and with free content when you download it. However, there are some tools that restrict how much you can access for free but keep in mind that most of the tools that we review once you get the table will have

free access to all the content. Another thing to keep in mind for the fees, is that some of the fees could be paid by family agency or group or a school. An example is, some situations come up where a school district pays for all community members to use the information and the tool. That means, as far as cost, there's a lot of variation on what's available and what will fit into your program needs. The last column that I'm going over on this slide is about data usage. So this kind of data we're referring to is cellular internet data. Because the person might own the phone or the other device but it's good to keep in mind where these hidden costs might come from. So in the table we use a check mark to mean that the app needs cellular data or Wi-Fi every day you open the app to get new tips or activities. If you see a phone icon, in the table once it's available, that would mean that users may need to pay for the cost of the text messages.

We also have a clear note if "none" was in notes column, then it would mean that there's no need for a daily cellular data usage. So that would mean that users can open an app without needing an internet connection. One thing that is a little more detailed than even this part will be content delivery. So, I thought I would go over some of the information we found in sort of a broad sense so we have them as headers at the top of the table. So each app and tool was reviewed for how they customize their content for example. So that would mean, what could be changed in the tool. An example could be that the agency, you as providers, can add on some information to the tool to let groups and individuals who use the tool to get more information that's specific to your area. Or some question that your group wants to highlight when you're working with parents. Then our next column over is content advisers. And one of the things that we thought would be important is how did they create the tips or the features and the apps and companies use lots of different inputs. So sometimes it was from educators but sometimes it was also a parent input.

So as they designed the program, they asked for feedback. The next column...is award year one, it's called duration of information cycle. And what that simply means is, how long will you get new content. If the table says 2-year cycle, that means that you'd get two years of free tips. And we thought this would be helpful for planning and use as well.

One thing that might be helpful as you're trying to decide is what materials would a family need at home. And that will be listed in the table as well. An example would be just common items that are often seen in a household such as dishes or something else you use to prepare food. The next column I want to go over is delivery of information. And this one is just simply how parents get the information. What we notice is there was two general patterns. One is that the parent pulls the information. So that could be that the parent opens the app and then chooses the activity. In other words, they have a lot of control over what they're doing. The other version that we saw very commonly is being what we called "pushed" by the tool. So that would be an example of a text message. So a text message gets sent straight to your digital device. I would like to move on, and I apologize if I'm moving through rapidly, but there's a lot of information to cover and we hope to have these tables available in the future. The next mode that we want to go over is presentation mode. And what we meant by that is how does the tool present the information. One really common theme that we saw was that the apps could model how to do an activity. So an example would be a video right inside the app that shows a parent doing the activity with their child. The other version we generally saw was prompting. So this could be a notification or a tip, it could be a reminder, and it can come in many different ways but we generally call them a prompt.

And so with that information available, it could help you decide which mode is helpful for you and the families who work with you. The last column on the table is called sharing of information. This was our way of categorizing, does the tool communicate back and forth with the user. So as a reminder, all the tools are encouraging parent-child interaction but how much does the tool itself try to communicate with the parent. So many apps are one way and that means the tool sends information straight to the user. We did find some that we called somewhat two-way. And that would be when the tool asks for feedback from the user. And then our last category was just two-way. Meaning they actually, the tool designers try to exchange and communicate information back and forth between themselves and the parent. So, there's a lot of information that we try to make available. And I wanted to move on to questions you might have. So, this is a great opportunity to share your thoughts about what questions you have that are on the table, and we'll be looking at the chat box.

So let's see what's popping up on your mind. So one of the questions is, "Are the apps adaptable to the needs and levels of the child or even the level of the parent?" And, so there's lots of - most of the apps don't adapt a lot. So that'll be an interesting question for future apps. And the tools, I'm just going to cover one more question because we don't want to run out of time and we'll come back to some of these, I hope. One question is, "How many tools teach concepts versus giving a list of activities?" And there's quite a blend, it varies across the tools that we looked at. And the most common thing is to give activities and tips for quick and easy activities that you can do every day. Alright, we'll keep monitoring the chat window but I wanted to just point some common patterns before we move on to some examples about how to-some example tools.

So what I wanted to emphasize for some things that we noticed across the apps themselves. Not necessarily that the apps planned it that way but what we thought was interesting and might be helpful and interesting to you. So one of them would be that the apps and the tools are making an attempt to meet parents where they are. Parents are busy and digital devices are often nearby.

The other thing we wanted to emphasize is that tools have a chance to empower parents as children's first and best teachers. Next, that the tools are trying to assist parents that are facing adversity. That for example, different developers spoke about providing information to low income parents and parents who don't otherwise have access to this kind of information.

Another thing to think about is that developers think about the power of technology to reach busy parents. Lastly, I wanted to emphasize, much of the content really focuses on enhancing everyday interactions and building parent-child interactions. Great! So I'm going to just briefly touch on two examples. One is an app example. We picked just a hypothetical one. Some of the apps require no internet access so it's an interesting advantage. Many of the apps include English and Spanish, and several of the apps let parents pull their own choice. And what I've pictured is an example where it's a short description. The parent can see if the description is interesting to them and then click on the video. Many of the apps you pick whether you want your language of choice. And once you go into the app then it goes into the language that you have chosen. So in short, parents can pick whatever interests them. And the main themes are often that you can have a conversation while you're doing something every day at home. And this one just happens to be an example of a mom doing laundry and asking her child about the color of her shirt, as a quick example. And one common thing you can think about is, how much does the app use text and video, this one uses both. Other apps use different presentation modes and that might make a difference on how you choose what apps might be interesting to your

groups. Okay, so a lot of our attendees mentioned they've used text messages, so this might be old news to all of you or maybe it's new to many of you.

So the main theme we've picked, for example, the messages are in a sense free. There are some apps where the messages are completely free but you always have to keep in mind, someone is going to need a phone number to sign up and some sort of message plan for most of the tools. After sign-up they may be asked to talk about when was their child born, or when do they think their child will be born. Last, an example might be that a text message might provide 3 texts per week and they might be doing a tip. So, that's really what I wanted to say about text messaging. The-both kinds of tools can be very helpful by your decision is to think about what may work best in your groups and communities and people you work with. Alright, so I want to turn it over to Sarah, because we want to wrap up with some summary ideas. So, take it away Sarah.

Sarah: Right, thanks, Rechele. So to summarize here, what we've talked about in this webinar today: Early care and education professionals can partner with parents and families to help children develop their language and literacy skills and meet school readiness goals. So in this webinar series titled, "Family Engagement in Language and Literacy Development", professionals working in Head Start, Early Head Start, and Child Care settings, can learn about different ways providers can families to promote children's language and literacy. And thereby enhance other skills and development to support school readiness goals. So in this webinar we discussed some recent work that compiled a review of digital tools available for promoting parent engagement with children's language and literacy. We identified 15 digital tools designed to promote parent engagement with children's language and literacy. And one important theme that emerged is that all the tools recognize that parents play an important roll in children's development. Importantly though, we do not yet know how effective these tools are for increasing parent engagement with children's language and literacy. And this is certainly an area in which additional research should be done. Because technologies change frequently, we also attempted to provide you with some critical considerations that you can use to evaluate existing tools and new tools as they come on the market. And so with that, I'd like to move us forward. We have some discussions planned but instead, I will let Shela tell you about discussion time that we're going to have after the webinar. So, Shela, I will hand it over to you.

Shela: Thank you, Sarah! Thank you, Rechele and thank you, Josh! This has been a really interesting and exciting presentation. And we can tell from the chat that hopefully the participants also found it to be interesting and exciting as well. So, a few next steps as we wrap up for the hour. Just quickly, we wanted to know how you plan on using the information that's presented today in your community? And, go ahead and continue sharing that information in the chat box. Because, we'll have about 15 minutes that we'll stay on after the top of the hour and we can continue chatting with you. And responding to any questions you might have, or just kind of engaging with you through chat. And as I mentioned at the beginning of the webinar, that this is part of a series so I want to be able to share with you the upcoming dates. So, today's webinar August 29 was on Digital Tools for Families that Promote Children's Language and Literacy. About 4 weeks from now on September 26, we'll talk about Developing Children's Literacy and Social and Emotional Skills. And the third webinar in the series that we have planned is on October 31 and another topic that several of you seem to be interested in was Partnering with Families to

Support Dual Language Learners. And as a follow up to this webinar, your feedback is extremely important to us so you'll receive an email by the end of the day today with a link to a survey where you can provide your input on this webinar. And as soon as you fill out that survey, you'll get a certificate to show that you spent your hour on this webinar. And if you have any questions, comments, any thoughts that come up afterwards, we always welcome your input, here's how you can contact us. And thank you again to all of our presenters and all of our participants.

[End video]